

## CLAIMS

What is claimed is:

1. A printing system comprising:  
a plurality of print heads for printing an image on a print receiving medium;  
print head actuators operable for individually repositioning said print heads to optimal locations for each print job; and  
software operable while a current print job is active for determining said optimal print head locations for a next anticipated print job.
2. The printing system of claim 1 wherein said software supplies said position defining information to said print head actuators prior to the start of a next print job.
3. The printing system of claim 2 wherein at least a portion of said position defining information is provided to said print heads while said current print job is active.
4. The printing system of claim 1 wherein a print head of said print heads includes ink jet nozzles.
5. The printing system of claim 1 wherein a print head of said print heads includes pens.
6. The printing system of claim 1 wherein print head actuators each comprise guides defining a locus of operable locations for said print head, each said guides including a lead screw for positioning said associated print head.
7. The printing system of claim 1 including a brake mechanism configured to hold a print head of said print heads at a fixed location while an image is printed on the print receiving medium.
8. The printing system of claim 1 wherein said print heads remain stationary during printing and a printing receiving medium is moved past said print heads to form images on said receiving medium.

9. A method for printing an image onto a print receiving medium comprising: determining, while a current image is being printed, a desired subsequent printing position for one or more print heads; and

repositioning, at the completion of the printing of said current image, one or more print heads to said desired subsequent printing position.

10. The method of claim 9 wherein said determining a desired subsequent printing position comprises a print job queue from which said subsequent print job is selected.

11. The method of claim 10 wherein said subsequent print job is an anticipated next print job.

12. The method of claim 9 wherein said repositioning one or more print heads comprises providing at least some repositioning information prior to the completion of said current print job.

13. The method of claim 9 wherein said repositioning one or more print heads comprises moving some of said print heads prior to the completion of said current print job.

14. The method of claim 9 wherein said repositioning said one or more print heads includes operating a motor.

15. The method of claim 9 further comprising transporting said print receiving medium beneath said one or more print heads.

16. The method of claim 9 further comprising printing said image onto said print receiving medium by operating ink jet nozzles of said one or more print heads.

17. The method of claim 9 further comprising printing said image onto said print receiving medium by operating pens of said one or more print heads.

18. An apparatus for printing an image onto a print receiving medium comprising:  
a plurality of print heads;  
means for repositioning each of said print heads from previous printing locations to desired print head locations in accordance with a determined desired print head location for each said print head on a print job by print job basis;  
means for determining said desired print head location for a next anticipated print job while a current print job is in process; and  
means for enabling said repositioning means immediately upon the conclusion of said current print job.
19. The apparatus of claim 18 wherein said determining means includes means for examining a print queue to determine an anticipated next print job.
20. The apparatus of claim 18 wherein said repositioning means is enabled for currently non-active ones of said print heads prior to the completion of said current print job.
21. The apparatus of claim 18 wherein a print head of said print heads includes ink jet nozzles.
22. The apparatus of claim 18 wherein a print head of said print heads includes pens.
23. The apparatus of claim 18 wherein said means for repositioning said print heads includes a lead screw which positions a print head of said print heads.